## REMARKS

Applicant is in receipt of the Office Action mailed July 21, 2008.

## Claims

Claims 1-19 and 26-27 are currently pending. No claims have been amended, added, or cancelled. Reconsideration is respectfully requested in view of the following remarks.

## 35 U.S.C. §103 Rejections

The Examiner rejected claims 1-2, 8-9, and 14-15 under 35 U.S.C. §103(a) as being unpatentable over Kohashi et al. (U.S. Patent No. 6,642,960) (hereinafter "Kohashi"). Applicant respectfully disagrees with the rejection.

Kohashi does not disclose, teach, or suggest at least "**calculating** for a current missing green pixel, **interpolation errors in an East-West (EW) direction** at known neighboring green pixels, and **averaging the EW interpolation errors** to obtain an EW error (emphasis added)" as recited in claim 1. In response, the Examiner makes statements such as: "If the defect pixel used pixels in a vertical direction surrounding itself, it would use the upper gray pixel and the lower white pixel which are not the same and means this is the incorrect interpolation direction, and therefore is an interpolation error if used" and "Therefore Kohashi calculates if pixels in a certain direction surrounding the defect pixel are the 'same', and if not it is an interpolation error. (Office Action mailed July 21, 2008, pages 2-3)." **Applicant respectfully asserts the Examiner's general statements do not address the wording used in the Applicant's claims.** For example, the Examiner does not address and does not point to any location in the Kohashi for the teaching of "**calculating** for a current missing green pixel, **interpolation errors in an East-West (EW) direction**" or "**averaging** the EW **interpolation errors**" as recited in claim 1. Instead, the Examiner is making general statements about how using patterns in Kohashi result in correct interpolations or interpolation errors. Kohashi does not teach and the Examiner provides no support in

14

Kohashi for <u>calculating</u> interpolation errors and <u>averaging</u> the interpolation errors. As noted previously, Kohashi teaches:

> By using such 9 pattern forms in representing the relative signal levels of the pixel groups in the four directions of "U", "D", "R", "L", in a manner corresponding to the pixel positions, the relative signal levels of the eight pixels around the fault pixel are **made into a pattern by means of the four sets of patterns** (step 32-3). Thus obtained pattern of the relative signal levels of the four sets of pixel groups in the surrounding region is **then compared with previously set patterns** (step 32-4). In particular, all possible patterns are previously provided and the pattern obtained from the relative signal levels of the pixel groups in the surrounding region is compared with the provided patterns. (emphasis added) (Kohashi, col. 14, line 59 – col. 15, line 3).

Kohashi discloses **forming and comparing <u>patterns</u>** to determine an edge configuration. Kohashi does not teach or suggest "calculating for a current missing green pixel, interpolation errors in an East-West (EW) direction" or "averaging the EW interpolation errors" as recited in claim 1. For example, as disclosed in the Applicant's specification, interpolation errors may be calculated according to:

> …the EW error (EWE) and NS error (NSE) are:
> $$EWE(3,4)=abs(G(3,2)+G(3,6)-2*G(3,4)) \ (E-1)$$
> $$NSE(3,4)=abs(G(1,4)+G(5,4)-2*G(3,4)) \ (E-2)$$
> (Specification, page 12, lines 16-18).

Other embodiments are also contemplated and described in the Applicant's specification.

Further, Kohashi does not disclose, teach, or suggest at least "selecting a direction **indicated by a <u>minimum</u> of the EW error and the NS error** as the edge direction (emphasis added)" as recited in claim 1. As noted above, Kohashi does not even disclose calculating interpolation errors. Applicant also respectfully submits Kohashi also does not disclose selecting a direction indicated by a <u>minimum</u> of calculated interpolation errors.

Applicant respectfully asserts claim 1 and claims dependent upon claim 1 are allowable for at least the above reasons. Applicant respectfully requests the Examiner withdraw the rejection to claim 1 and claims dependent thereon.

Similarly, Kohashi does not disclose, teach, or suggest at least "calculating… interpolation errors" or "selecting a direction indicated by a minimum of the EW error and the NS error as the edge direction" as recited in claim 8. Applicant respectfully asserts claim 8 and claims dependent upon claim 8 are allowable for at least the above reasons. Applicant respectfully requests the Examiner withdraw the rejection to claim 8 and claims dependent thereon.

Furthermore, Kohashi does not disclose, teach, or suggest at least "calculating… interpolation errors" or "selecting a direction indicated by a minimum of the EW error and the NS error as the edge direction" as recited in claim 14. Applicant respectfully asserts claim 14 and claims dependent upon claim 14 are allowable for at least the above reasons. Applicant respectfully requests the Examiner withdraw the rejection to claim 14 and claims dependent thereon.

Applicant respectfully asserts Kohashi also does not disclose, teach, or suggest at least "wherein averaging the EW interpolation errors comprises summing the EW interpolation errors and dividing a resultant sum by a number of EW interpolation errors summed together to obtain an EW error" as recited in claim 26 or "wherein averaging the EW interpolation errors comprises summing the EW interpolation errors to obtain an EW error without dividing a resultant sum by a number of EW interpolation errors summed together" as recited in claim 27. In response the Examiner cites Kohashi at col. 14, lines 10-12 which states: "…and a defect compensation is performed by interpolating the fault pixel by an average level of the interpolating pixels (step 21-5)." Applicant respectfully notes the Examiner's cited portion of Kohashi deals with interpolating the fault pixel using the selected interpolation pixels. Kohashi does not teach, and the Examiner does not address, averaging interpolation errors. The Examiner takes official notice that

"taking an average in terms of summing the parts and dividing by the total of the parts is basic math (Office Action mailed 7/21/08, page 6)." Applicant respectfully asserts the Examiner's official notice is limited to how to calculate an average. Applicant asserts the Examiner is not taking official notice that averaging interpolation errors as part of the method of claim 1 was well known. (As Applicant has asserted, averaging interpolation errors is not taught by Kohashi). Applicant respectfully asserts claims 26-27 are also allowable for at least the above reasons.

**Allowable Subject Matter**

The Examiner indicated claims 3-6, 10-13, and 16-19 would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant respectfully submits claims 3-6, 10-13, and 16-19, dependent on patentably distinct claims 1, 8, and 14, respectively, are also allowable for at least the above reasons. Applicant respectfully requests the Examiner withdraw the objection to the above claims.

The Examiner further indicated claim 7 stands allowed.

**CONCLUSION**

In light of the foregoing amendments and remarks, Applicant submits the application is in condition for allowance, and an early notice to that effect is requested.

If any extensions of time (under 37 C.F.R. § 1.136) are necessary to prevent the above-referenced application(s) from becoming abandoned, Applicant(s) hereby petition for such extensions. The Commissioner is hereby authorized to charge any fees which may be required or credit any overpayment to Meyertons, Hood, Kivlin, Kowert & Goetzel P.C., Deposit Account No. 50-1505/5896-08600/JCH.

Also filed herewith are the following items:

☐ Request for Continued Examination

☐ Terminal Disclaimer

☐ Power of Attorney By Assignee and Revocation of Previous Powers

☐ Notice of Change of Address

☐ Other:

Respectfully submitted,

/Jeffrey C. Hood/

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